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A NEW SPECIES OF *STICTOPISTHUS* THOMSON (HYMENOPTERA: ICHNEUMONIDAE) FROM INDIA¹

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(With four text-figures)

Stictopisthus carinata sp. nov. is described and a key to the Indo-Australian species of *Stictopisthus* is provided.

INTRODUCTION

Stictopisthus Thomson (Hymenoptera: Ichneumonidae: Mesochorinae) is a moderate sized genus with worldwide distribution. Species of this genus are secondary parasitoids of lepidopterous larvae and hyperparasitoids of species of *Euphorus* Nees and *Cotesia* (= *Apanteles*) Cameron (Braconidae). Townes *et al.* (1961) recorded seven species from Indo-Australian region, namely *Stictopisthus australiensis* Szépligeti from Australia, *S. javensis* Ferrière from Java, *S. guamensis* Townes from Micronesia and *Mesochorus hapaliae* Rao, *M. panti*

Rao, *M. plusiaephilus* Viereck, and *M. srinairaini* Gupta from India. Townes (1971) provided generic diagnosis, pictorial key and distribution of this genus. In the present study a new species, *Stictopisthus carinata* is described based on the material collected from Aurangabad, Maharashtra, India and a key to the Indo-Australian species of *Stictopisthus* Thomson is provided.

The types are with the authors for the time being and will be deposited in National collection of the Zoological Survey of India, Calcutta.

Stictopisthus carinata sp. nov.

FEMALE: 6.20 mm in length. *Head* (Figs. 2-3): 0.80 as long as broad, above 2× as broad as thick; vertex weakly, sparsely punctate; ocellar triangle moderately raised, sparsely punctate; ocello-ocular distance 2× their diameter; frons finely mat, above antennal

¹ Accepted June 1986.

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socket grooved, smooth, with paired, submedian vertical weak carinae from median ocellus to inner side of antennal sockets; face and clypeus forming a broad surface; face sparsely punctate, 0.85 as long as broad, baso-medially weakly elevated, laterad to elevation weakly depressed, apico-lateral corners obliquely, finely striate, upper margin with a transverse carina that is straight across the mid line, laterally weakly oblique above; clypeus apico-medially subshiny, not separated by distinct groove, clypeal foveae moderate; mandible moderately elongate, weakly striato-punctate, teeth equal; cheek as long as the basal width of mandible, striate; maxillary palpi long, enough to reach the centre of mesosternum; temple sparsely punctate; occiput shiny; occipital carina complete; genal carina joining to the oral carina above the base of mandible.

Antenna: Equal to the body length; 2+33 segmented; first flagellar segment 1.10× as long as the length of scape and pedicel combined, 1.45× as long as the second segment; terminal segment 2.50× as long as broad.

Thorax: 2.15× as long as broad; collar subshiny, coarsely punctate, pronotum finely, sparsely punctate, with deep oblique groove behind collar, epomia weak; mesoscutum convex, medially moderately and laterally finely punctate, notaulii distinct; scutellum convex, as long as broad, finely, sparsely punctate, lateral carinae restricted to base; postscutellum small, shiny; propleurum subshiny, sparsely punctate; mesopleurum dorso-anteriorly densely punctate, medially subshiny, with sparse, minute punctures, rest sparsely punctate, prepectal carina extending below the midheight of mesopleurum, its upper end joining to front of mesopleurum, postpectal carina incomplete, sternaulus anteriorly strongly impressed, posteriorly weak, mesopleural impression in the form of a pit, joining mesepimeron by weak groove, speculum smooth; metapleurum fine-

ly, sparsely punctate; propodeum (Fig. 4) evenly convex, finely, sparsely punctate, areola elongate, 1.45× as long as broad, emitting costulae at middle, propodeal spiracles large, circular; hind femur 3.20× as long as broad, basitarsus 0.95 as long as the length of rest tarsus, claw weakly curved, simple.

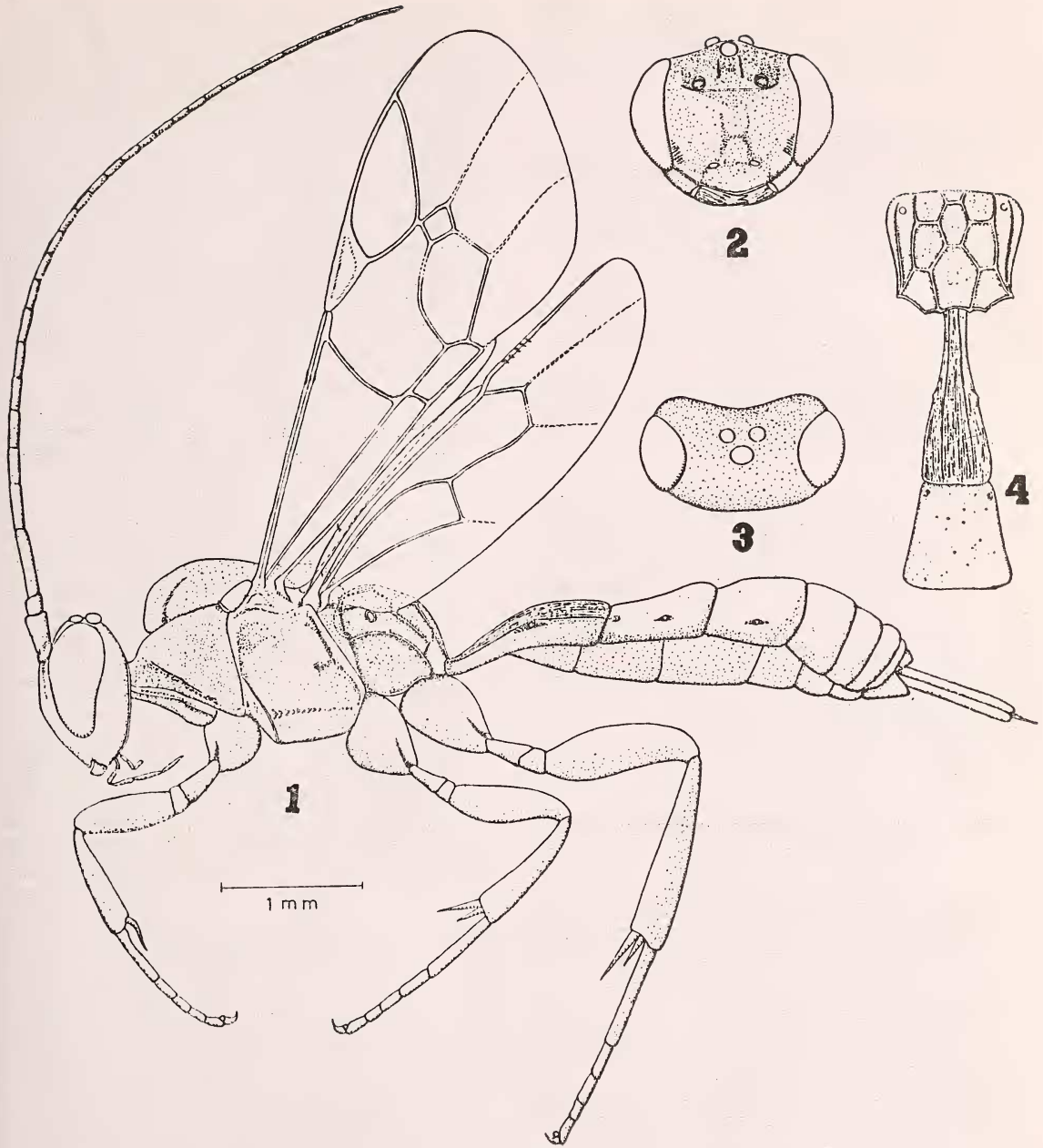
Fore wings: 4.20 mm in length, 1.55 mm in width; stigma 2.80× as long as broad, not hyaline; basal abscissa of radius 0.50 the length of its apical abscissa; areolet broadly petiolate, 0.80 as high as wide, receiving second recurrent near its middle; second recurrent 0.50 the length of basal abscissa of subdiscoideus, apically fenestrated, slightly inclivous; discocubitus strongly arched; basal vein moderately arched; nervulus distad by 0.75 its length, vertical; basal abscissa of postnervulus as long as its apical abscissa; second discoidal cell 2× as long as broad; discocubital cell 1.55× as long as broad.

Hind wings: 3.20 mm in length, 0.95 mm in width; with 1+4-5 hamuli; basal abscissa of radiella 0.25 the length of its apical abscissa; latter with basal stub, rest in the form of a trace; mediella strongly arched; basal abscissa of cubitella as long as its apical abscissa, latter in the form of a trace; discoidella absent; nervellus straight, reclivous; brachiella traceable.

Abdomen: 1.20× as long as the length of head and thorax combined; first tergite (Fig. 4) 2.50× as long as broad, with dorsolateral and ventrolateral carinae, dorsally longitudinally, closely acciculate, laterally subshiny, spiracles at 0.50, glymma present; rest of the tergites subshiny; thyridium present at the base of second tergite; ovipositor sheath 7.25× as long as wide, 0.50 as long as the length of hind tibia; ovipositor long, straight.

Coloration: Pale-brown. Ocellar triangle, first lateral area of propodeum blackish-brown; mandibular teeth, ovipositor sheath, wing veins

NEW DESCRIPTIONS



Figs. 1-4. *Stictopisthus carinata* sp. nov. ♀
1. Adult; 2. Head, frontal aspect; 3. Head, view from above; 4. Propodeum with first and second tergites.

and stigma reddish-brown; hind tibia basally and apically, first tergite medially, second tergite latero-basally, third tergite apically black.

MALE: Unknown.

Holotype: ♀ INDIA: MAHARASHTRA, Aurangabad, Cantonment, 5.viii.1982, on wing, coll. L. J. Kanhekar. Antenna and wings mounted on slides and labelled as above.

Paratypes: 2 ♀ ♀, INDIA: MAHARASHTRA, Aurangabad, Himayat Bagh, 1 ♀, 30.xi.1982, on wing, coll. L. J. Kanhekar; 1 ♀ reared from prepupae of *Charops obtusa obtusa* Morley, 10.x.1975, coll. K. S. Heble.

Comments: *Stictopisthus carinata*, sp. nov. resembles *S. panti* Rao and *S. srinaraini* Gupta but readily differs from the former in having: ocello-ocular distance 3× the inter-ocellar distance, frons mat, face punctate, distally all veins of fore wings joining to apical margin, first tergite acciculate, spiracles at 0.50 and second tergite longer than broad; however it differs from the latter in the characters shown in the key.

KEY TO THE INDO-AUSTRALIAN SPECIES OF
Stictopisthus THOMSON

1. Areola basally open, long and narrow.
Micronesia *guamensis* Townes, 1958
— Areola basally close, short and wide 2
2. Nervulus interstitial or basal to basal vein 3
— Nervulus distal to basal vein 4
3. Propodeum blackish above; areola narrower at base than apex; abdominal petiole as long as postpetiole; mandibular teeth brown. India
..... *plusiaephilus* Viereck, 1913
— Propodeum brownish or black; areola broader at base than apex; abdominal petiole longer than postpetiole; mandibular teeth black. Java

- *javensis* Ferrière, 1925
4. Ovipositor as long as second abdominal tergite. Antenna 20 segmented; occiput wrinkled; second abdominal tergite broader than long. Australia *australiensis* Szépligeti, 1914
— Ovipositor longer than second abdominal tergite 5
5. Antennae shorter than the body; face rugulose, shiny; mesoscutum smooth and shiny; notauli indistinct. India *hapaliae* Rao, 1953
— Antennae longer than or as long as the body; face punctate or smooth; mesoscutum punctate; notauli distinct except in *srinaraini* Gupta 6
6. Ocello-ocular distance 1.35× the inter-ocellar distance; face smooth; basal abscissa of radius 0.30 the length of its apical abscissa. India
..... *panti* Rao, 1953
— Ocello-ocular distance 2-3× the inter-ocellar distance; face punctate; basal abscissa of radius 0.45-0.50 the length of its apical abscissa 7
7. Vertex smooth; antennae 28 segmented; first flagellar segment 1.55× as long as second segment; scutellum shiny; propodeum smooth; postnervulus intercepted above the middle; apical abscissa of cubitella and brachiella without any trace; first tergite with a small knob-like elevation in the middle of its apical margin. India *srinaraini* Gupta, 1957
— Vertex sparsely punctate; antennae 35 segmented; first flagellar segment 1.45× as long as second segment; scutellum sparsely punctate; propodeum sparsely punctate; postnervulus intercepted at middle; apical abscissa of cubitella and brachiella weakly traceable; first tergite without any knob-like elevation. India *carinata*, sp. nov.

ACKNOWLEDGEMENTS

We are deeply indebted to Prof. R. Nagabhushanum, Head, Department of Zoology, Marathwada University, Aurangabad for providing research facilities. The Senior author is thankful to C.S.I.R., New Delhi for awarding the junior and senior research fellowships during the tenure of his work.

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A NEW GALL-MIDGE OF THE GENUS *LESTODIPLOSI* KIEFFER
(DIPTERA: CECIDOMYIIDAE) FROM MAHARASHTRA, INDIA¹

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(With seven text-figures)

A new gall-midge species *Lestodiplosis brevilobata*, collected at light in Aurangabad, Maharashtra, India has been illustrated and described with a key to Indian species.

***Lestodiplosis brevilobata* sp. nov.**

(Figs. 1-7)

MALE: Body 1.16 mm long. Eyes confluent above. Trophi slightly produced. *Palpus*: quadriarticulate, moderately long, light-straw, sparsely setose; first segment (10:6) short, cylindrical, length $1.66 \times$ its maximum thickness; second segment (16:7) cylindrical, length a little less than $2.30 \times$ its maximum thickness; third segment (15:6) cylindrical, narrowed basally, shorter and thinner than second, length $2.50 \times$ its maximum thickness, fourth segment (20:5) cylindrical, longest of all, slightly thinner than third, narrower at base than at apex, length $4.00 \times$ its maximum thickness. *Antenna*: longer than body, with

2 + 12 segments, flagellate segments binodose, with long apical stems, enlargements with two whorls of long setae, one on each enlargement, with three whorls of long, regular circumfillsa, one on basal and two on apical enlargements, basal and apical whorls of subequal length, middle whorl shortest, circumfillsa loops nearly as long as the diameter of the apical enlargements; scape (23:25) cup-shaped, wider than long; pedicel (13:17) sub-globose, wider than long; third segment (62) confluent with and longer than fourth, with a very small basal prolongation (2:4), basal enlargement (15:16) 0.24 the length of the segment and slightly broader than long, basal stem (10:6) 0.66 the length of the basal enlargement and $1.66 \times$ its maximum thickness, apical enlargement (21:17) longer than basal, 0.33 the length of the segment and $1.23 \times$ its maximum thickness, apical stem (13:7) shorter than apical

¹ Accepted June 1986.

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